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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,470	03/26/2004	Takahiro Naka	448563/0245	4001

7590 07/30/2007
Lawrence Rosenthal
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180 Maiden Lane
New York, NY 10038

EXAMINER

VO, ANH T N

ART UNIT	PAPER NUMBER
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2861

MAIL DATE	DELIVERY MODE
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07/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,470

Applicant(s)

NAKA ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 and 51-72 is/are pending in the application.
- 4a) Of the above claim(s) 37,38,41-45,51-59 and 66-72 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46 is/are allowed.
- 6) ☒ Claim(s) 1-5,15,16,18,36,39,40,60 and 63 is/are rejected.
- 7) ☐ Claim(s) 6-14,17,19-35,61,62,64 and 65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>05/21/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL REJECTION

Claims 37-38, 41-45, 51-59 and 65-72 should be canceled accordance with the Selection filed on 11/27/2006.

The new prior art reference necessitated a new ground of rejection as shown below:

CLAIM REJECTIONS

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 15-16, 18, 36, 39-40, 60 and 63 are rejected under 35 USC 103 (a) as being unpatentable over Kimura et al (US 4,604,633) in view of Baker et al. (US Pat. 6,243,115).

Kimura et al discloses in Figure 43 a printing device comprising:

- a container body (211);
- a first reservoir chamber (212) which is located within the container body and which is at least in part defined by a first flexible member;
- a second reservoir chamber (213) which is located within the container body and which is at least in part defined by a second flexible member (214);
- a liquid delivery port formed in the container body; a first flow path through which

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the first reservoir chamber is in fluid communication with the second reservoir chamber; and a second flow path (24) through which the second reservoir chamber is in fluid communication with the liquid delivery port;

- wherein the second reservoir chamber expands to cause the second flexible member to reach a first position when pressure is applied through the first flexible member to the liquid existing a predetermined amount or more in the first reservoir chamber (column 23, lines 10-27);
- wherein a sensor (215) which is disposed adjacent to the second reservoir chamber (213) and which detects whether the second flexible member (214) reaches the first position;
- wherein the sensor (215) includes a stationary contact fixed relative to the container body; and a movable contact movable (not shown) relative to the container body by the second flexible member, see Figures 27 and 31-37; and
- wherein the body includes a first case member that has a first recess and the first flexible member (212) closing an opening of the first recess and that defines the first liquid reservoir chamber; and a second case member (213) has a second recess.

However, Kimura et al does not disclose that the pressure is applied through the first flexible.

Nevertheless, Baker et al. disclose in Figures 3-4 an delivery system for an ink jet printer comprising a pressurizing unit which includes a sealed pressurizing chamber (48) into which the pressurized fluid (air) is introduced to change a volume, and a pressurized fluid introduction port (68) communicating with the pressurizing chamber (48), and for introducing the pressurized fluid (air) to the inside of the pressurizing chamber (48), and is constructed to pressurize the liquid reservoir chamber (54) of the tank unit by a volume change of the pressurizing chamber (48) for expanding the ink carrying capacity of the cartridge with a minimum of wasted ink remaining unused in the cartridge.

It would have been obvious to a person having skill in the art at the time the invention was made to employ the pressurizing unit as suggested by Baker et al in the device of Kimura et al

for the purpose of expanding the ink carrying capacity of the cartridge with a minimum of wasted ink remaining unused in the cartridge.

Response to Applicant's Arguments

The applicant's arguments over Childers are moot without traverse.

Allowable Subject Matter

Claims 6-14, 17 and 19-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims are allowed because the prior art fails to teach or suggest "an urging member" as combined in claim 6, 13-14 and "a third flexible member" as combined in claims 17 and 19.

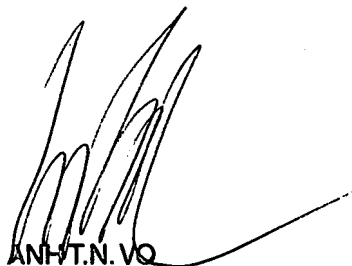
Claim 46 is allowable. This claim is allowed because the prior art fails to teach or suggest "a second pressurizing unit which pressurizes the liquid in the second reservoir chamber to deliver the liquid from the liquid delivery port in a state where the liquid in the first reservoir chamber is consumed and the pressure of the pressurized fluid is not transmitted to the liquid in the inside of the first reservoir chamber, and includes a press member for pressing the second flexible film toward a direction of decreasing a volume of the second reservoir chamber" in the combination as claimed.

Claims 61-62 and 64-65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims are allowed because the prior art fails to teach or suggest "a movable part includes at least a part of the flexible film" as combined in claim 60.

CONCLUSION

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Monday to Friday from 9:00 A.M. to 7:00 P.M.. The fax number of this Group 2861 is (571) 273-8300.

A handwritten signature in black ink, appearing to be 'Anh T.N. Vo', written in a cursive style.

ANH T.N. VO
PRIMARY EXAMINER

July 21, 2007